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☐ 1: P07044. Mercuric resistan...[gi:127014]

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LOCUS MERR_SALTI 144 aa linear BCT 01-MAR-2002
 DEFINITION Mercuric resistance operon regulatory protein.
 ACCESSION P07044
 PID g127014
 VERSION P07044 GI:127014
 DBSOURCE swissprot: locus MERR_SALTI, accession P07044;
 class: standard.
 plasmid:pHCM1, IncFII, created: Apr 1, 1988.
 sequence updated: Apr 1, 1988.
 annotation updated: Mar 1, 2002.
 xrefs: gi: gi: 16505740, gi: gi: 16505933, gi: gi: 150389, gi: gi:
455296
 xrefs (non-sequence databases): InterPro IPR000551, Pfam PF00376,
 PRINTS PR00040, PROSITE PS00552
 KEYWORDS Transcription regulation; Activator; Repressor; Mercuric
 resistance; Mercury; DNA-binding; Plasmid; Transposable element.
 SOURCE *Shigella flexneri*.
 ORGANISM *Shigella flexneri*
 Bacteria; Proteobacteria; gamma subdivision; Enterobacteriaceae;
 Shigella.
 REFERENCE 1 (residues 1 to 144)
 AUTHORS Parkhill, J., Dougan, G., James, K.D., Thomson, N.R., Pickard, D.,
 Wain, J., Churcher, C., Mungall, K.L., Bentley, S.D., Holden, M.T.G.,
 Sebaihia, M., Baker, S., Basham, D., Brooks, K., Chillingworth, T.,
 Connerton, P., Cronin, A., Davis, P., Davies, R.M., Dowd, L., White, N.,
 Farrar, J., Feltwell, T., Hamlin, N., Haque, A., Hien, T.T., Holroyd, S.,
 Jagels, K., Krogh, A., Larsen, T.S., Leather, S., Moule, S., O'Gaora, P.,
 Parry, C., Quail, M., Rutherford, K., Simmonds, M., Skelton, J.,
 Stevens, K., Whitehead, S. and Barrell, B.G.
 TITLE Complete genome sequence of a multiple drug resistant *Salmonella*
 enterica serovar Typhi CT18
 JOURNAL Nature 413 (6858), 848-852 (2001)
 MEDLINE 21534947
 REMARK SEQUENCE FROM N.A.
 SPECIES=*S.typhi*; STRAIN=CT18; PLASMID=pHCM1
 REFERENCE 2 (residues 1 to 144)
 AUTHORS Barrineau, P., Gilbert, P., Jackson, W.J., Jones, C.S., Summers, A.O.
 and Wisdom, S.
 TITLE The DNA sequence of the mercury resistance operon of the IncFII
 plasmid NR1
 JOURNAL J. Mol. Appl. Genet. 2 (6), 601-619 (1984)
 MEDLINE 85159407
 REMARK SEQUENCE FROM N.A.
 SPECIES=*S.flexneri*; PLASMID=IncFII NR1; TRANSPOSON=Tn21
 COMMENT -----
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[FUNCTION] MEDIATES THE MERCURIC-DEPENDENT INDUCTION OF MERCURY
RESISTANCE OPERON. IN THE ABSENCE OF MERCURY MERR REPRESSES
TRANSCRIPTION BY BINDING TIGHTLY TO THE MER OPERATOR REGION; WHEN
MERCURY IS PRESENT THE DIMERIC COMPLEX BINDS A SINGLE ION AND
BECOMES A POTENT TRANSCRIPTIONAL ACTIVATOR, WHILE REMAINING BOUND
TO THE MER SITE.

[SIMILARITY] BELONGS TO THE MERR FAMILY OF TRANSCRIPTIONAL
REGULATORS.

FEATURES	Location/Qualifiers
source	1..144 /organism="Shigella flexneri" /plasmid="" /db_xref="taxon:623" 1..144
Protein	1..144 /product="Mercuric resistance operon regulatory protein"
Site	10..29 /site_type="dna-binding" /note="H-T-H MOTIF (POTENTIAL)."
Site	82 /site_type="metal-binding" /note="HG(2+)."
Site	117 /site_type="metal-binding" /note="HG(2+)."
Site	126 /site_type="metal-binding" /note="HG(2+)."

ORIGIN
1 mennlenlti gvfakaagvn vetirfyqrk gllrepdkpy gsirrygead vvrvkfvksa
61 qrlgfsldel aellrlldgt hceeasslae hklkdvrekm adlarmetvl selvcachar
121 kgnvscplia slqgeaglar samp

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Revised: October 24, 2001.

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